

**AMENDMENTS TO THE CLAIMS:**

Please cancel claims 7, 8, 10, 15-21 and 27, without prejudice.

This listing of claims will replace all prior versions and listings of claims in the Application:

**Claim 1 (previously presented):** A tool array for biomedical surgery, comprising:

- (i) a plurality of tools each comprising layered polymer microactuators arranged to induce geometrical changes and movements via an electrochemically induced change of volume in at least one polymer layer, and
- (ii) said tools being arranged as an array of tools mounted on a carrier having the form of a needle for insertion into a cannula/catheter through which the tools can be electrically actuated via externally to induce a mechanical movement to act upon biological structures.

**Claim 2 (original):** Tool arrays according to claim 1, characterized in that the layered polymer consists of a single layered polymer.

**Claim 3 (original):** Tool arrays according to claim 1, characterized in that the layered polymer consists of a bi-layered polymer.

**Claim 4 (original):** Tool arrays according to claim 1, characterized in that the layered polymer consists of a multilayered polymer and metal layers.

**Claim 5 (original):** Tool arrays according to claim 1, characterized in that the mechanical movement is used to position a biological structure.

HAYES SOLOWAY P.C.  
3450 E. SUNRISE DRIVE  
SUITE 140  
TUCSON, AZ 85718  
TEL. 520.882.7623  
FAX. 520.882.7643

175 CANAL STREET  
MANCHESTER, NH 03101  
TEL. 603.668.1400  
FAX. 603.668.8567

**Claim 6 (original):** Tool arrays according to claim 1, characterized in that the mechanical movement is used to hold a biological structure.

**Claims 7-8 (canceled)**

**Claim 9 (original):** Tool arrays according to claim 1, characterized in that the mechanical movement is used to fortify a biological structure.

**Claim 10 (canceled)**

**Claim 11 (previously presented):** A tool array according to claim 1, wherein a number of identical tools are located on the tool array extending along a length of the cannula, catheter or needle, and wherein actuation of a tool closest to the exit of the catheter is arranged to release a tool from the tool array and is arranged to leave it at the point of exit of the catheter in order to mount the tool at/in some biological structure.

**Claim 12 (previously presented):** A tool array according to claim 11, wherein a number of identical tools are located on the tool array extending along the catheter or needle and where each tool is arranged to become individually actuated.

**Claim 13 (previously presented):** Tool arrays according to claim 11, characterized in that a number of non-identical tools are located on the tool array extending along the catheter and where each tool is arranged to become individually actuated.

**Claim 14 (previously presented):** Tool arrays according to claim 1, characterized in that an individual tool is a clip arranged to join biological tissues or tissue parts, and arranged to hold the said tissues or tissue parts to allow healing.

**Claims 15-21 (canceled)**

**Claim 22 (previously presented):** A tool array according to claim 1, wherein the polymer microactuators are built of layers, of which at least one is a conjugated polymer.

**Claim 23 (previously presented):** A tool array according to claim 22, wherein the conjugated polymer is selected from the group consisting of pyrrole, aniline, thiophene, para-phenylene, vinylene, and a phenylene polymer and copolymer, and substituted forms thereof.

**Claim 24 (previously presented):** Tool arrays according to claim 22, characterized in that the tool is built of bi-layered polymer, where the electrically activated volume change of said, at least one conjugated polymer is arranged to cause a bending of said bi-layer.

**Claim 25 (previously presented):** Tool arrays according to claim 22, characterized in that the tool is built of multilayered polymer, where the electrically activated volume change of said, at least one conjugated polymer is arranged to cause a bending of said multilayer.

**Claim 26 (original):** Tool arrays according to claim 11, characterized in that each individual tool is a clip arranged to join biological tissues or tissue parts, and arranged to hold the said tissues or tissue parts to allow healing.

**Claims 27 - 33 (cancelled)**

**Claim 34 (previously presented):** A tool array according to claim 11, wherein the polymer microactuators are built of layers, of which at least one is a conjugated polymer.

**Claim 35 (previously presented):** A tool array according to claim 34, wherein the conjugated polymer is selected from the group consisting of pyrrole, aniline, thiophene, para-phenylene, vinylene, and a phenylene polymer and a copolymer and substituted forms thereof.

**Claims 36-42 (cancelled)**

**HAYES SOLOWAY P.C.**  
3450 E. SUNRISE DRIVE  
SUITE 140  
TUCSON, AZ 85718  
TEL. 520.882.7623  
FAX. 520.882.7643

175 CANAL STREET  
MANCHESTER, NH 03101  
TEL. 603.668.1400  
FAX. 603.668.8567